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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

J .	Application No.	Applicant(s)			
	10/724,391	GUSTAFSSON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Xavier Szewai Wong	2616			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period way reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timulated will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 26th C	<u> October 2007</u> .				
<i>;</i>	<i>,</i> —				
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-3,5-28 and 30-36 is/are pending in the day of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3,5-28 and 30-36 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 26 th October 2007 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	e: a) \boxtimes accepted or b) \square objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

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DETAILED ACTION

- Applicant's Amendment, Replacement Drawing and Specification
 Amendment filed 26th October 2007 are acknowledged
- Claims 1-3, 5-16 and 18-28 have been amended
- Claims 30-36 have been newly added
- Claims 4 and 29 have been canceled
- Claims 1-3, 5-28 and 30-36 are pending in the present application
- This action is made Final

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 - 3, 5 - 7, 9, 15 - 18, 22, 23, 28 and 30 - 34 are rejected under 35 U.S.C. 102(a) as being anticipated by Ramaswamy (WO 02/098057 A2).

Consider claims 1, 15, 22 and 28, Ramaswamy discloses a mobile IP based communication system and method with means to select access network for a mobile multi-access terminal (pg. 5 ln. 124; pg. 6 ln. 161-170; pg. 13 ln. 353-354; fig. 1 shows multi-access portable terminal 10) comprising means for requesting (receiving portable terminal information from a server 27), at a network management entity 26 (network-based selection unit), from a plurality of servers (fig. 1 items 27,28) which contains information (database) desired by portable terminal user (profile) stored (pg. 12 ln. 337-343); the server 27

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transmits database information to the network management entity 26 (pg. 12 ln. 341-343; fig. 1 items 26,27); entity 26 selects a current optimized / best network via server 27 (or 28) database for the portable terminal user 10 (pg. 12 ln. 344-347); the portable terminal microprocessor 118 (access agent & manager) communicates with the entity 26 with indication (of a recommendation) of best access network on interface 124 (pg. 8 ln. 221-225; pg. 10 ln. 263-269; pg. 11 ln. 306-320; fig. 2). The portable terminal microprocessor can send its terminal-specific (IP) information to the network management entity (pg. 7 ln. 203-207; pg. 8 ln. 208,219-221; pg. 10 ln. 283-286). Ramaswamy further discloses the portable terminal comprising microprocessor (access manager) determines an access network based on access network recommendation (enable a final decision), user input references and/or priority information of the portable terminal (pg. 8 ln. 211-225; pg. 10 ln. 263-268,281-289).

Consider claims 2, 16 and 23, as applied to claims 1, 15 and 22, Ramaswamy discloses the network management entity 26 (access selection unit) receives terminal-specific (IP) information from the portable terminal 10 microprocessor 118 (access agent) for selecting a best access network (pg. 7 ln. 203-207; pg. 8 ln. 208-210; pg. 10 ln. 284-292).

Consider claims **3** and **17**, as applied to claims **1** and **15**, **Ramaswamy** discloses executing an access selection algorithm based on predefined prioritization criteria (pg. 13 ln. 362-376; clm. 14).

Consider claim **5**, as applied to claim **1**, **Ramaswamy** discloses the intelligent content (profile) server 27 in figure 1 is connected to an associated server 28 database

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and therefore, collecting and adapting at least some database information to be read by the network management entity 26 (pg. 7 ln. 196-202; pg. 12 ln. 343-346).

Consider claim **6**, as applied to claim **1**, **Ramaswamy** discloses the intelligent content server 27 (database) information comprises information desired by the portable end user (pg. 12 ln. 339-341).

Consider claim **7**, as applied to claim **2**, **Ramaswamy** discloses the terminal-specific information comprises geographic coverage (location) and network availability for the best-suited transmission path (pg. 12 ln. 331-335; fig. 2 item 124 location).

Consider claim **9**, as applied to claim **1**, **Ramaswamy** discloses the network-management entity *26* (access selection unit) may calculate / predict appropriate networks (current or "next best") based on optimizing criteria (priority) and communicates the calculation results (current or "next best") to the portable terminal with a microprocessor access agent and allow the portable terminal (based on the entity's predictions) to search for the "next best" network (pg. *8* ln. *208-211/216-218/222-224*; pg. *13* ln. *362-376*).

Consider claim **18**, as applied to claim **15**, **Ramaswamy** discloses means for predicting and communicating with a next best (future) access network for the portable platform based on information from contents server 27 (pg. 8 ln. 216-225; pg. 13 ln. 355-361).

Consider claim **30**, **Ramaswamy** discloses a mobile IP based communication system and method with means for selecting an access network for a mobile multi-access terminal (pg. 5 ln. 124; pg. 6 ln. 161-170; pg. 13 ln. 353-354; fig. 1 shows multi-access

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portable terminal *10*) comprising an intelligent content (profile) server (fig. *1* item *27*) which contains information (database) desired by portable terminal user (profile) stored (pg. *12* ln. *337-343*); network management entity *26* (access wizard unit) queries and determines a current optimized / <u>best network</u> via server *27* (or *28*) database for the portable terminal user *10* among a plurality of networks (<u>pg. 6 ln. 166-170</u>; pg. *12* ln. *344-347*); a portable terminal comprising microprocessor tries to connect to a best access network based on access network recommendation, user input references and/or priority information of the portable terminal (pg. *8* ln. *211-225*; pg. *10* ln. *263-268,281-289*).

Consider claim **31**, as applied to claim **30**, **Ramaswamy** discloses the best access network is one of (inherently) a plurality of access networks available to the mobile terminal (pg. 6 ln. 166-170), wherein a (final) decision is made by the portable device on which access network to use (pg. 8 ln. 216-218).

Consdier claim **32**, as applied to claim **30**, **Ramaswamy** discloses the access network specific information includes (user) priority, quality and cost (policies) optimizing criteria (pg. 8 ln. 208-212).

Consider claim **33**, as applied to claim **30**, **Ramaswamy** discloses the network management entity *26* (access wizard unit) receive terminal specific information from the portable device to determine the best access network (pg. *12* ln. *341-346*).

Consider claim **34**, as applied to claim **33**, **Ramaswamy** discloses the network-management entity 26 (access wizard unit) may calculate / predict appropriate networks ("next best") based on optimizing criteria (priority) and communicates the calculation results ("next best") to the portable terminal with a microprocessor access agent and

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allow the portable terminal (based on the entity's predictions) to search for the "next best" network (pg. 8 ln. 208-211/216-218/222-224; pg. 13 ln. 362-376). The current best access network is derived from a previous "next best" access network, therefore, it is interpreted that the portable device's current access network is the current best access network.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each

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claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8, 10, 19 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Jiang (U.S Pat 6,898,432 B1).

Consider claim **8**, as applied to claim **1**, **Ramaswamy** discloses the claimed invention except mentioning the mobile terminal resides in a vehicle and the terminal-specific information from the access agent comprises measurements from a device selected from a group of GPS device, a route sensor and a velocity sensor. **Jiang** discloses a vehicle GPS system with availability monitor / agent *34*, route and speed sensing integrated position sensors *46* (col. *5* ln. *59-65*; col. *6* ln. *38-40*; col. *8* ln. *30-35*; *abstract*; fig. 7 step *100*; fig. 9 route). It would have been obvious to one of ordinary skill in the art to incorporate the teachings by **Jiang**, in the method of **Ramaswamy**, in order to choose the best network based on cost, availability and performance.

Consider claims 10 and 19, as applied to claims 2 and 16, Ramaswamy discloses the claimed invention including the network-management entity as an access selection unit. However, Ramaswamy did not explicitly mention the terminal-specific information comprises an indication of a current route further comprising steps of: an access selection unit determining which access networks that will be possible access candidates after a predetermined period of time; and the access selection unit

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suggesting, if there is no access candidate for at least a portion of the current terminal route, an alternative terminal route to the access agent. Jiang discloses a route dependent communications planning architecture (col. 4 ln. 53-55; fig. 5) comprising a coverage manager 42 and location manager 44 that determines whether access networks should be switched (to other candidates such as from WAN to MAN) periodically / a certain period if no access candidate (out of one coverage area) for the terminal / vehicle (col. 4 ln. 12-14; col. 6 ln. 19-24; col. 7 ln. 63-67; col. 8 ln. 30-50; fig. 7 step 102). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings by Jiang, in the method and device of Ramaswamy, in order to avoid disconnection of the mobile user to access networks.

Consider claim **36**, as applied to claim **33**, **Ramaswamy** discloses the claimed invention except may not have explicitly mentioned the terminal-specific information comprises an indication of a current position and a current route. **Jiang** discloses a <u>route</u> dependent communications planning architecture (col. 4 ln. 53-55; fig. 5) comprising a coverage manager 42 and location manager 44 (in availability monitor 34) that determines whether access networks should be switched (to alternate routes – e.g. another registered location to be reached in a next period) if no access candidate (e.g. access disruption) for the terminal / vehicle (col. 4 ln. 12-14; col. 6 ln. 19-24; col. 7 ln. 63-67; col. 8 ln. 30-50; fig. 7 step 102). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings by **Jiang**, in the method and device of **Ramaswamy**, in order to avoid disconnection of the mobile user to access networks.

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Claims 11, 12, 20, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Kall et al (U.S Pub 2004/0203914 A1).

Consider claims 11, 12, 20, 25 and 26, as applied to claims 1, 11, 15, 22 and 25, Ramaswamy shows in figure 1, a network-management entity 26 (access selection unit) and the intelligent content (profile) servers 27,28 are in an overall service network connected to internet 30, related to mobility and access handling (clm. 11). However, Ramaswamy did not explicitly disclose the service network relating to security or comprising a security server unit with means for communicating with a profile server for authentication, authorization and accounting (AAA) purposes. Kall et al disclose an AAA security server 204 authenticates information retrieved from a home subscriber server HSS/HLR 103 or profile server (prgh. 0035; fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings by Kall et al, in the method, device and system of Ramaswamy, in order to identify subscribers.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Kall et al (U.S Pub 2004/0203914 A1), as applied to claim 11, and in further view of Mizell et al (U.S Pat 7,230,951 B2).

Consider claims 13, as applied to claims 11, Ramaswamy, as modified by Kall et al, discloses the claimed invention except mentioning an access selection unit sends

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a triggering message to a security server unit in the service network when a mobile terminal is about to change from a first to a second access network; and the security server unit transfers security information between security domains associated with the first and second access networks in response to the triggering message. **Mizell et al** disclose as (about) a mobile terminal moves into a foreign network (from a first access network to a second access network), a foreign agent FA (access selection unit as the FA routes network; col. 5 ln. 16-25) triggers an access request 226 to a secure AAA server (col. 5 ln. 34-41/59-61; fig. 2); a home agent HA, through the AAA server, transfers a registration 222 of the mobile terminal's former home address (domain) to a new home address (col. 5 ln. 64-67; col. 6 ln. 1-18; fig. 2 steps 222,242,250). It would have been obvious to one of ordinary skill in the art to incorporate the teachings by **Mizell et al**, in the method and device of **Ramaswamy** as modified by **Kall et al**, in order to authenticate a new user and reduce unnecessary traffic.

Claim 14 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Sauvage et al (U.S Pub 2004/0098669 A1).

Consider claims 14 and 27, as applied to claims 1 and 22, Ramaswamy discloses claimed invention except explicitly mentioning a profile server sends terminal-related information to *an application server* in the service network; and the application server adapts an application for the mobile terminal based on the terminal-related information. Sauvage et al disclose in a service network (prgh. 0026; fig. 1 items 3,8-

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10) a profile server (database) 9 sends user agent 1 (terminal-related URI information) the software and hardware RDF files to the application server as the application server adapts to the user's requested game with the appropriate frame class (prghs. 0029,0031; fig. 3). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings by **Sauvage et al**, in the method and system of **Ramaswamy**, in order to facilitate applets generation.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Mizell et al (U.S Pat 7,230,951 B2).

Consider claim 21, as applied to claim 20, is rejected in the same grounds as claim 13.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by Ramaswamy (WO 02/098057 A2) in view of Gress et al (U.S Pat 6,813,507 B1).

Consider claim **24**, and as applied to claim **22**, **Ramaswamy** discloses the intelligent content server (profile) server except explicitly mentioning it provides a unified interface towards its associated databases. **Gress et al** show a server *26*, through the internet, provides a unified messaging system interface *30 a,b,c* that links to profile databases *22,32* (col. *4* ln. *39-50*; *abstract*; fig. *1*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of a profile server providing a unified interface towards its

associated databases as taught by Gress et al, in the system of Ramaswamy, in order

Claim **35** is rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated by **Ramaswamy** (**WO 02/098057 A2**).

to provide scalability for recognizing multiple communication platforms.

Consider claim **35**, as applied to claim **34**, **Ramaswamy** discloses the portable terminal-specific information comprises geographic coverage (pg. 12 ln. 331-335; fig. 2 item 124 location). While **Ramaswamy** may not have *explicitly* mentioned current position and current route in the portable device, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a navigation system e.g. GPS function into the portable device for determining current position and current route.

Response to Arguments

- 1. Applicant's arguments filed 26th October 2007 have been fully considered but they are not persuasive.
- 2. The Applicants suggest that **Ramaswamy** does not teach "requesting, at a network-based access selection unit, database information from a network-based profile server with a plurality of databases." To clarify, the examiner interprets the portable communication device 10 [inherently comprises a network-based access selection unit or a unit with similar functionalities] in order to request information from intelligent content servers 27 and 28 (which reads on as a plurality of databases) as stated on page 12 lines

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337-341 and figure 1 items 10, 27 and 28, etc. If the portable device does not perform a request, then the statement "the intelligent server 27 which contains the information desired by the (portable device) user (pg. 12 ln. 339-340)" would not be possible. Also, since the intelligent content server (database) 27 is connected to the network management entity 26 and connected (indirectly) to content server (database) 28 is through 27 and the internet as shown in figure 1.

- 3. The Applicants also put forward that **Ramaswamy** does not teach "communicating an access network recommendation comprising an indication of current best access network from the access selection unit to an access agent in the mobile terminal." To clarify, the examiner interprets the network-management entity 26 (access selection unit) may calculate / predict appropriate networks (<u>current or "next best"</u>) based on optimizing criteria (priority) and communicates the calculation results (<u>current or "next best"</u>) to the portable terminal (*inherently* with an access agent to perform the calculation) and allow the portable terminal (based on the entity's predictions) to search for the "next best" network (pg. 8 ln. 208-211/216-218/222-224; pg. 13 ln. 362-376). The current best access network is derived from a previous "next best" access network, therefore, it is interpreted that the portable device's current access network is the current best access network.
- 4. Further, the Applicants advise that **Ramaswamy**'s microprocessor in the portable platform does not operate as an access agent and access manager since it does not select which access network to use; and therefore, fails to disclose "determining, at the access manager, which access network to use based on the access network

recommendation and input user preferences and/or priority information in the mobile terminal." To clarify, the portable device <u>searches</u> and <u>tries to connect</u> (therefore, both underlined actions read on as "selecting") a "next best" network on page 8 lines 216-218. There needs to be some sort of "processor or manager or agent" for performing the selection; and since the microprocessor *causes* the mobile interface to <u>connect</u> to an external network based on a user's input (preferences) and <u>conditions</u> (optimizes based on QoS, which may include priority as well-known in the art; page 10 lines 263-269) the mobile to connect to a network (page 10 lines 283-285; page 11 lines 293-295), the examiner interprets the microprocessor inherently determines the network selection.

5. Therefore, in view of the above reasons and having addressed applicants' argument, the previous rejection is maintained and made Final by the examiner.

Conclusion

6. This action is Final. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xavier Wong whose telephone number is 571-270-1780. The examiner can normally be reached on Monday through Friday 8:30 am - 6:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Xavier Szewai Wong

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